

Appl. No.: 10/707,927  
Amdt. Dated: 4/25/2006  
Reply to Office action of: 02/21/2006

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1 (currently amended) A multiple-undercutting milling process for manufacturing a printed circuit board comprising:

providing a circuit board substrate having a first surface for adhering a conductive metallic material and a second surface suitable for milling;

adhering a conductive metallic material printed circuit to said substrate first surface;

providing bending areas on said circuit board by simultaneously undercutting multiple parallel strips on said circuit board substrate second surface using a milling tool; and

bending said circuit board substrate at said bending areas up to 180° into a U-shape without deteriorating said conductive metallic material printed circuit adhered to said circuit board substrate.

Claim 2 (previously presented) A multiple-undercutting milling process for manufacturing a printed circuit board according to claim 1, characterized in that said milling tool comprises a roll having multiple polishing strips on its surface.

Claim 3 (currently amended) A multiple-undercutting milling process for manufacturing a printed circuit board according to claims 1 and 2, characterized in that the thickness of said conductive layer metallic material is from about 65 to about 400 microns.

Claim 4 (currently amended) A multiple-undercutting milling process for manufacturing a printed circuit board according to claims 1 and 2, characterized in that the thickness of said conductive layer metallic material is 105 microns.

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Claim 5 (currently amended) A multiple-undercutting milling process for manufacturing a printed circuit board according to claims 1 and 2, characterized in that the thickness of said conductive layer metallic material comprises copper.

Claim 6 (previously presented) A multiple-undercutting milling process for manufacturing a printed circuit board according to claim 1, characterized in that said milling tool comprises a roll having multiple polishing teeth on its surface.